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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/814,330  
Filing Date: April 01, 2004  
Appellant(s): RAJSIC, CARL

Terry W. Kramer (Reg. No. 41,541)  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed April 14, 2008 appealing from the Office action mailed January 8, 2008.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

U.S. 7,130,393	HALL, JR. et al.	10-2006
U.S. 6,757,278	BI et al.	6-2004
U.S. 2002/0064159	SHIRAKAWA	5-2002

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims **1, 4, 5, 7, and 9-13** are rejected under 35 U.S.C. 102(e) as being anticipated by Hall, Jr. et al. (U.S. 7,130,393) (hereinafter “Hall”). Hall teaches all of the limitations of the specified claims with the reasoning that follows.

Regarding claim **1**, “a method of establishing a secure Layer-3 connection across an ATM network, the Layer-3 connection having a first endpoint at an egress port of an originating multiservice switch (MSS) and a second endpoint at an ingress port of a terminating MSS” is anticipated by the SVC for VtoA establishment performed among calling party 20 (first endpoint), called party 22 (second endpoint), ATM edge switch 14 (originating multiservice switch), and MSCP 44 (terminating MSS) as shown in Figure 1.

“Configuring the terminating MSS with anticipated security information” is anticipated by MSCP 44 (terminating MSS) gathering called party closed user group identifiers (anticipated security information) as spoken of on column 19, lines 57-59.

“At the originating MSS, generating a setup message including embedded security information” is anticipated by the generation of an input ATM setup message

including a VtoA designator and called party number parameter (embedded security information) as spoken of on column 12, lines 29-34.

"Sending the setup message to the terminating MSS" is anticipated by the interception of the input ATM setup message by ASIP 40 and subsequent forwarding of information to MSCP 44 (terminating MSS) as spoken of on column 19, lines 44-48.

"At the terminating MSS, extracting the embedded security information from the setup message" is anticipated by the reception (extraction) of ATM setup message information by MSCP 44 and the subsequent retrieval of corresponding calling party closed user group identifiers as spoken of on column 19, lines 46-50.

"Determining whether the embedded security information matches the anticipated security information" is anticipated by the determination of whether a closed user group identifier (security information) that is common (match) to both the calling party and the called party exists as shown in step 508 of Figure 5, and spoken of on column 20, lines 1-22.

Lastly, "if the embedded security information matches the anticipated security information, establishing the Layer-3 connection" is anticipated by the successful establishment of the VToA call 520 in response to a positive response to steps 508, 510, and 514 of Figure 5 as spoken of on column 20, lines 61-64.

Regarding claim 4, "wherein the embedded security information and the anticipated security information are Closed User Group Interlock Codes" is anticipated by the calling party and called party closed user group identifiers spoken of on column 19, lines 48-56.

Regarding claim 5, "wherein the Layer-3 connection is established by an originating user belonging to a configured set of originating users, and wherein the embedded security information and the anticipated security information are associated with the configured set of originating users" is anticipated by calling party 20 (originating user) that generates an ATM setup message as shown in Figure 1 and spoken of on column 12, lines 29-34.

Regarding claim 7, "wherein the Layer-3 connection is established to a terminating user belonging to a configured set of terminating users, and wherein the embedded security information and the anticipated security information are associated with the configured set of terminating users" is anticipated by called party 22 (terminating user) that receives an ATM setup message as shown in Figure 1 and spoken of on column 15, lines 1-6.

Regarding claim 9, "at the originating MSS, setting a value of a flag in the setup message to indicate that the setup message includes the embedded security information" is anticipated by the VToA designator (flag) in the generated ATM setup message that indicates a request to set up an SVC for VToA service as spoken of on column 12, lines 29-34 and 65-67.

Lastly, "at the terminating MSS, reading the value of the flag before extracting the embedded security information" is anticipated by the extraction of information from the received ATM setup message and subsequent retrieval of closed user group identifiers (security information) as spoken of on column 19, lines 44-56.

Regarding claim 10, "An originating multiservice switch (MSS) for establishing a secure Layer-3 connection across an ATM network to a terminating MSS, comprising a call control for generating a Layer-3 connection setup message including embedded security information, and for sending the setup message to the terminating MSS" is anticipated by the ATM edge switch 14 (originating multiservice switch) that intercepts an ATM setup message and extracts information (embedded security information) from the message for subsequent forwarding to MSCP 44 (terminating MSS) as spoken of on column 19, lines 44-56.

Lastly, "wherein the embedded security information is compared with anticipated security information at the terminating MSS" is anticipated by the determination of whether a closed user group identifier (embedded and anticipated security information) that is common (match) to both the calling party and the called party exists as shown in step 508 of Figure 5, and spoken of on column 20, lines 1-22.

Regarding claim 11, "instructions for generating a Layer-3 connection setup message to be sent from an originating switch (MSS) to a terminating MSS; and instructions for embedding security information within the setup message" is anticipated by the ATM edge switch 14 (originating multiservice switch) that intercepts an ATM setup message and extracts information (embedded security information) from the message for subsequent forwarding to MSCP 44 (terminating MSS) as spoken of on column 19, lines 44-56, as well as the data structure (instructions) stored on a storage media used for the VToA call establishment spoken of on column 4, lines 39-49.

Lastly, "the security information compared with anticipated security information at the terminating MSS" is anticipated by the determination of whether a closed user group identifier (embedded and anticipated security information) that is common (match) to both the calling party and the called party exists as shown in step 508 of Figure 5, and spoken of on column 20, lines 1-22.

Regarding claim 12, "a terminating multiservice switch (MSS) for establishing a secure Layer-3 connection across an ATM network from an originating MSS" is anticipated by MSCP 44 (terminating multiservice switch) of Figure 1 used for the establishment of an SVC VToA call as spoken of on column 14, lines 10-17.

"Stored anticipated security information" is anticipated by MSCP 44 (terminating MSS) gathering called party closed user group identifiers (anticipated security information) as spoken of on column 19, lines 57-59.

"Means for querying a comparator of two pieces of security information" and "a call controller for receiving a Layer-3 connection setup message, for extracting embedded security information from the setup message, for querying the comparator to determine whether the embedded security information corresponds to the anticipated security information" is anticipated by MSCP 44 (means, comparator, call controller) that determines whether a closed user group identifier (security information) that is common (match) to both the calling party and the called party exists as shown in step 508 of Figure 5, and spoken of on column 20, lines 1-22.

Lastly, "establishing the Layer-3 connection in the event that the embedded security information corresponds to the anticipated security information" is anticipated



by the successful establishment of the VToA call 520 in response to a positive response to steps 508, 510, and 514 of Figure 5 as spoken of on column 20, lines 61-64.

Regarding claim 13, "instructions for receiving a Layer-3 connection setup message received from an originating multiservice switch" is anticipated by MSCP 44 that receives ATM setup message information as spoken of on column 19, lines 44-48.

"Instructions for extracting embedded security information from the setup message" is anticipated by the reception (extraction) of ATM setup message information by MSCP 44 and the subsequent retrieval of corresponding calling party closed user group identifiers as spoken of on column 19, lines 46-50.

"Instructions for retrieving anticipated security information" is anticipated by MSCP 44 (terminating MSS) gathering called party closed user group identifiers (anticipated security information) as spoken of on column 19, lines 57-59.

"Instructions for determining whether the embedded security information corresponds to the anticipated security information" is anticipated by the determination of whether a closed user group identifier (security information) that is common (match) to both the calling party and the called party exists as shown in step 508 of Figure 5, and spoken of on column 20, lines 1-22.

Lastly, "instructions for establishing a Layer-3 connection in the event that the embedded security information corresponds to the anticipated security information" is anticipated by the successful establishment of the VToA call 520 in response to a positive response to steps 508, 510, and 514 of Figure 5 as spoken of on column 20,

lines 61-64, as well as the data structure (instructions) stored on a storage media used for the VToA call establishment spoken of on column 4, lines 39-49.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims **2 and 3** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hall, Jr. et al. (U.S. 7,130,393) (hereinafter "Hall") in view of Shirakawa (U.S. 2002/0064159).

Regarding claims **2 and 3**, *Hall* teaches the method of claim 1. *Hall* also teaches where the closed user group identifiers (security information) is associated with the calling party and called party as spoken of on column 19, lines 48-59.

While *Hall* also teaches the use of switched virtual circuit (SVC) connections, *Hall* does not explicitly teach the use of Soft Permanent Virtual Circuit connections.

However, *Shirakawa* teaches the use of SPVC connections in an ATM environment as spoken of on page 1, paragraph 10.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to use the SPVC teachings of *Shirakawa* in place of the SVC teachings of *Hall* in order to provide an end-to-end ATM connection with fault tolerance as spoken of on page 1, paragraph 10 of *Shirakawa*.

Claims **6 and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hall, Jr. et al. (U.S. 7,130,393) (hereinafter "*Hall*") in view of Bi et al. (U.S. 6,757,278) (hereinafter "*Bi*").

Regarding claims **6 and 8**, *Hall* teaches the method of claim **1**. *Hall* does not teach connection establishment through IP interface addresses at the originating and terminating multiservice switches and where the security information is associated with these IP interface addresses.

However, *Bi* teaches a secure ATM system where IP-adapted SS7 traffic may be allowed to traverse the ATM network via IP interfaces as spoken of on column 7, lines 19-23.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to combine the IP teachings of *Bi* with the teachings of *Hall* in order to provide secure ATM connection establishment in an IP-over-ATM environment.

#### **(10) Response to Argument**

Regarding claim **1**, Appellant argues that *Hall* does not teach or suggest "configuring the terminating MSS with anticipated security information" as claimed.

However, as provided in the previous Office Action, *Hall* teaches MSCP 44 (terminating MSS) gathering (configured with) all called party closed user group identifiers (anticipated security information) as spoken of on column 19, lines 57-59.

It is held that these called party closed user group identifiers can be considered "anticipated security information", as a calling party closed user group identifier

corresponding to a called party closed user group identifier is expected to be found (anticipated) in order to establish a connection as shown in step 508 of Figure 5, and spoken of on column 20, lines 1-22.

Therefore, since no further explanation is given to "anticipated security information" in the claim language, it is held that *Hall* teaches the above limitation in question.

Regarding claims **10 and 11**, Appellant argues that *Hall* does not teach "embedded security information" that is "compared with anticipated security information at the terminating MSS" as claimed.

Regarding claim **13**, Appellant argues that *Hall* does not teach determining "whether the embedded security information corresponds to the anticipated security information" as claimed.

Regarding claims **10, 11, and 13**, Appellant further argues that step 508 of Figure 5 of *Hall* clearly does not involve a comparison of anticipated and embedded security information.

However, as provided in the Final Office Action, step 508 of *Hall* teaches the determination of whether a closed user group identifier (embedded and anticipated security information) that is common (match) to both the calling party and the called party exists as spoken of on column 20, lines 1-22.

It is held that the called party closed user group identifiers can be considered "anticipated security information", as a calling party closed user group identifier

corresponding to a called party closed user group identifier is expected to be found (anticipated) in order to establish a connection as spoken of on column 20, lines 1-22.

Regarding claim 12, Appellant argues that *Hall* does not teach "stored anticipated security information" as claimed.

However, as provided in the previous Office Action, *Hall* teaches MSCP 44 (terminating MSS) gathering (configured with) all called party closed user group identifiers (anticipated security information) as spoken of on column 19, lines 57-59. *Hall* further teaches how closed user group identifiers may be gathered from a database (stored) as spoken of on column 19, lines 48-51.

It is held that these called party closed user group identifiers can be considered "anticipated security information", as a calling party closed user group identifier corresponding to a called party closed user group identifier is expected to be found (anticipated) in order to establish a connection as shown in step 508 of Figure 5, and spoken of on column 20, lines 1-22.

Therefore, since no further explanation is given to "anticipated security information" in the claim language, it is held that *Hall* teaches the above limitation in question.

Regarding claim 4, Appellant argues that *Hall* does not teach "wherein the embedded security information and the anticipated security information are Closed User Group Interlock Codes" as claimed. Appellant further argues that *Hall* teaches away from the use of interlock codes.

However, as provided in the Final Office Action, *Hall* teaches the use of calling party and called party closed user group identifiers spoken of on column 19, lines 48-56, which provide closed user group service for VtoA calls. It is held that these calling party and called party closed user group identifiers may be interpreted to be "Closed User Group Interlock Codes", since they provide closed user group service, and since no further explanation of the functionality of the claimed "Closed User Group Interlock Codes" is provided in claim 4.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Michael J. Moore, Jr./

Examiner, Art Unit 2619

/Wing F. Chan/

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6/22/08

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